#### **Main Specifications**

Model	м300
Detector Type	VOx uncooled infrared FPA detector
Detector Resolution	384×288
Spectral Band	8~14μm
Pixel Pitch	12μm
NETD	<35mK
Frame Rate	25Hz
FOV	43.7°×31.9°
IFOV	1.98mrad
Focusing Mode	Manual focusing
Measuring Range	-20 °C∼+550 °C
Temperature Measurement Accuracy	$\pm 2^{\circ}\text{C}$ or $\pm 2\%$ of the reading (the larger one shall prevail)
Temperature Measurement Resolution	0.1°C
Measurement Tools	Central spot measurement/Hot and cold spot tracing
Image Modes	IR, Visible, PIP, Fuse
Palette	7
Temperature Alarm	Full frame high/low temperature alarm
Alarm Mode	Support image alarm
Secondary Analysis	Equipped with PC and app analysis software for secondary analysis
WiFi	Support WiFi data transmission
Screen Size	3.5" LCD (640×480) touch screen
Laser	Laser pointer
Storage	Standard 32GB SD card
Tripod Support	Yes, at the bottom of the handle
Operating Time	4h, @25°C indoor
Charging Time	About 3h, @25°C indoor
Weight	670g
Dimension	256.4×105.1×105.3mm
Operating Temperature	-10°C∼+50°C
Storage Temperature	-20°C~+60°C
Operating Humidity	Relative humidity 10%~95%, non-condensing
Drop Protection	2m
IP Encapsulation	IP54

#### **Company Profile**

IRay Technology Co., Ltd. concentrates on developing and manufacturing thermal imaging technologies and products, with completely independent intellectual property rights. IRay committed to providing global customers with professional thermal imaging products and solutions. The main products include IRFPA detectors, thermal imaging cores, and terminal products.

With R&D personnel accounts for 47% of all employees, IRay owns 567 patented technologies in multiple fields, such as the development of IC, the design and manufacture of MEMS sensor, and Matrix III image algorithms.

IRay products have been applied in various fields, such as disease control and prevention, industrial temperature measurement, intelligent surveillance, outdoor observation, automatic driving, AI and machine vision.



#### IRay Technology Co., Ltd.

Tel:400-998-3088 Fax:+86-535-3410604 Add:11th Guiyang St., Yantai, Shandong, P.R.China Website:www.infiray.com E-mail: sales@iraytek.com ·This manual is illustrative only. Technical specifications are subject

Authorized IRay Distributor:

Sample No.: DY2020Y003-M Printing time: Nov. 2020



# Tianxuan M300

Handheld Thermal Camera

Check clearly, Solve quickly







Tianxuan Series Handheld Thermal Camera comes with 384×288 VOx infrared detector and the optimized circuit, Matrix III intelligent image processing algorithm, and patented temperature measurement algorithm. It provides clearer thermal images and more accurate and stable temperature data. Also, it is equipped with an intelligent touch screen, manual focusing lens, dual vision, and various built-in analysis functions, to ensure accurate test results and efficient analysis and diagnosis.

## CE ROHS FC

## Intelligent analysis Discover more, within the image.

- Support WiFi transmission. After connected to mobile phone APP, it can analyse and share thermal images and temperature data at any time and
- Intelligent PC analysis software supports the resetting of the measurement parameters. Click to form the detection report, convenient for data sorting, analysing, and mining.
- It supports customized point/line/area temperature analysis. By simply clicking and dragging your finger on the touch screen, you can find the abnormal temperature of your interest on the thermal image. The intuitive feedback is simple and clear.



# Leven more powerful performance Makes M300 greater

With 384×288 thermal resolution, thermal sensitivity of 0.035°C, and 44°FOV, M300 can display rich details that low resolution products cannot, and make sure the abnormal temperature targets were not missed.

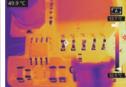


3.5-inch LCD high definition (640×480) capacitive touch screen, with adjustable screen brightness, is more convenient for observation and analysis.



Manual focusing provides clear images of targets from far to near. Especially for observing tiny near targets. The lens equiped on M300 is close to the quasi macro level, so tiny targets at the size of 1mm (at the distance of 0.1m) can be distinguished.





Manual focusing Tiny targets at the size of 1mm

It has a wide measurement range of -20°C~+550°C. From building detection to vehicle maintenance, it is adaptive to various scenes and purposes. There is no need to switch equipment, to save costs and improve efficiency.



It has powerful image fusion functions. With a 5 million pixels digital camera, it can provide more comprehensive and richer information, easier for observation under complex conditions.



### Professional design Expert's choice, choose to be an expert

It supports both screen-touch and button operation. The touch panel is clear to see, easy to use, and convenient to analyse the data. The physical buttons are user-friendly, and convenient to operate with gloves.



- It needs only one button to take photos or videos. Voice annotation is supported to perfectly restore the scene and simplify the complicated work procedures.
- Compact and robust design with IP54 protection and 2m drop-proof. All these are to ensure you can work without worry.





Simple user interface, pick and play, no need to be trained.

The large capacity 4500mAh battery in M300 is designed to be quickly detachable. Each M300 is shipped with two batteries and a charging dock, to meet heavy daily usage.

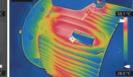


- **V** Dual modes support hand-held operation and fixed operation on the tripod, flexible and reliable.
- Laser pointer can locate targets quickly and accurately, improving inspection efficiency.
- Built-in high/low-temperature alarm supports user-defined alarm temperature.



#### Application Fields











Electrical diagnosis

Machinery maintenance

Product testing

Automotive maintenance

**HVAC** maintenance